DOCUMENT RESUME

ED 317 916 CG 022 434

AUTHOR Mayton, Daniel M., II; And Others
TITLE The Perceived Effects of Drug Messages on Use Patterns in Adolescents.
SPONS AGENCY Department of Education, Washington, D.C.
PUB DATE 28 Apr 90
GRANT G008720244
NOTE 27p.; Paper presented at the Annual Meeting of the Western Psychological Association (70th, Los Angeles, CA, April 26-28, 1990).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Adolescents; *Credibility; *Drug Education; *Drug Use; Information Needs; *Information Seeking; *Information Sources; Secondary Education; Secondary School Students; Student Attitudes

ABSTRACT

This study was undertaken with the goal of assessing perceived value of the media and other sources as credible providers of drug information. The strategy was designed to learn which sources have utility and credibility with youth in providing drug information; whether different message content and delivery style have differential effects upon that group; and whether widely held perceptions voiced by parents and teachers about their ineffectiveness as information sources were accurate. Subjects (N=223) were adolescents randomly selected by their principals. Double-blind interviews, arranged to protect respondent anonymity, were conducted by trained interviewers from a research methods class. No interview was held when either an interviewer or respondent knew the other. Among the important findings of the study are that: (1) parents and teachers were trusted; (2) doctors, nurses, law officers, and clergy were also credible but not visible to youth; (3) the "evil media" and celebrity fears of parents and teachers were largely ungrounded in adolescent perception; and (4) factual information from credible sources emphasizing the range of types of negative consequences associated with drug use could exert powerful effects upon adolescents' reported personal use of drugs. (Author/ABL)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED317916

The Perceived Effects of Drug Messages On Use Patterns In Adolescents

Daniel M. Mayton II Elizabeth A. Nagel Reese Parker

Lewis-Clark State College

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Daniel M Mayton II

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

CG 022 434

A paper presented at the annual meeting of the Western Psychological Association, Los Angeles, CA, April 28, 1990.

The research reported in this paper was made possible by a grant from the U.S. Department of Education (Grant No. GOO 8720244) to Lewis-Clark State College.

BEST COPY AVAILABLE

Abstract

Following a survey of over 5000 students in north central Idaho and southeast Washington, an interviewing strategy was implemented with 223 adolescents randomly selected by their principals. The strategy was designed to learn a) which sources have utility and credibility with youth in providing drug information, (b) whether different message content and delivery style have differential effects upon that group, and (c) whether widely held perceptions voiced by parents and teachers about their ineffectiveness as information sources were accurate. Double-blind interviews, arranged to protect respondent anonymity, were conducted by trained interviewers from a research methods class. No interview was held when either an interviewer or respondent knew the other. Among the important findings of the study were that (a) parents and teachers are trusted, credible sources of drug information, (b) doctors, nurses, law officers, and clergy are also credible but not visible to youth, (c) the "evil media" and celebrity fears of parents and teachers are largely ungrounded in adolescent perception, and (d) factual information from credible sources emphasizing the range of types of negative consequences associated with drug use can exert powerful effects upon adolescents' reported personal use of drugs.

The Perceived Effects of Drug Messages

On Use Patterns In Adolescents

Who provides adolescents with the information they know about alcohol and other drugs? Who do adolescents listen to about drugs? Do the messages they receive affect their drug use behavior? The source of persuasive communication and the content of the messages themselves are important if the communication is to impact the recipient of the message.

In the early days of our Drug Education Infusion Project, we pursued interactions with parents, teachers, community leaders, and Advisory Council members to gain input about effective messages, spokespersons, and media and message content for public information efforts. Repeatedly, we encountered, from teachers and parents, the perception that their students and children a) knew more about drugs than they did themselves, b) "wrote them off" or "pooh-poohed" them as credible sources for drug information, and c) assigned great credibility to peers as sources of information about drugs. Many parents and teachers cited experiences where the children and youth, with whom they are most concerned, chided them for their lack of experience and personal knowledge about drugs.

In short, parents, teachers and community leaders perceived adolescents' opinions of them as a) not being credible sources of information about drugs, b) being unable to influence adolescents' usage of drugs, c) assigning them an "inferior to

peers" status with respect to drug information, and d) being ineffective in countering media-delivered commercials, music, "role models," etc., which the adults perceived as promoting drug use. Further, highly concerned educators, parents and community leaders often expressed a desire for national, political, social, and artisan leaders (celebrities) to take a more active role in speaking out against drug use as they perceived such a strategy to be more likely to exert positive effects upon drug use levels than any intervention they themselves might undertake.

This report began as an attempt to answer the previously cited questions about adolescent drug usage by surveying adolescents' perceptions of the sources of the drug messages they receive and their perceptions of the impact the messages have upon their drug usage.

Research has consistently shown that credibility and trustworthiness are critical characteristics for a successful source of a persuasive message to possess (e.g. Saks and Krupat, 1988). Who do adolescents judge to be credible sources of information about alcohol and drugs? Whose information about drugs do adolescents trust?

In a review of 16 studies which addressed the credibility of information on drug education, three sources were found to be consistently reported as trustworthy sources (Sheppard, 1980). The media, professionals, and friends were reported by those involved in the studies as being trusted sources of information.

Bailey (1985) surveyed university and high school students enrolled in drug education programs to ascertain the perceived credibility of various message sources. Doctoral-level, university-trained professionals were reported to be the most credible source of information when speaking within their area of expertise.

The media, including the movies and music (most especially rock and roll), have been frequently identified as sources of negative influence upon the prosocial development of adolescents. The messages portrayed in the movies adolescents watch and the music they listen to can impact their opinions and behavior. For instance, Brown and Hendee (1989) investigated the interplay between adolescent development and music videos. They observed that immediately after watching violent and sexual music videos, teenagers identified a change in their opinions about acceptable sexual behaviors.

Heavy metal as a music form has remained a central focus of criticism concerning the detrimental effects of music on adolescents. Heavy metal groups which specialize in "shock rock" are often considered harmful to our kids (Mann, 1988). Recently, a Catholic Cardinal spoke out against the satanic influences portrayed in heavy metal music (Ostling, 1990). Suicides have been blamed on heavy metal's "satanic spell" (Lutes, 1988). In fact, the concern directed toward the relationship between violence and music was recently codified in the charges faced by

the band, Judas Priest, regarding the suicide death of an adolescent (Goldberg, 1988).

It is not surprising that many believe that popular music and movies increase the drug use and abuse levels of adolescents given the tenor of the drug content present in these forms of media. As we convened our Advisory Council and sought input for public education efforts for our project, the "evil media" theme and image also emerged as a form of blame placing. Many adults even announced a willingness to undertake boycotts, picketing efforts, and pressure tactics against alcohol advertising, rock and roll and country and western musicians and music which were perceived to be "soft" on, or promoting of, drug use.

Public service announcement campaigns are based upon the tenets espoused by professionals in the field of social marketing. It can best be defined as: "The design, implementation, and control of programs seeking to increase the acceptability of social ideas or practices in a target group (Kotter, 1975)."

Solomon (1989) discussed the hypothetical process whereby an individual moves through a state of unawareness of the message being promoted, through awareness and attitude change, to actual behavior change and maintenance of that behavior. It has been suggested that the media can greatly affect this process. Current philosophy supports the idea that the media can be influential, albeit, in an indirect manner (by working through

mediating variables) and cumulatively (effects occurring as a result of continuous exposure to certain kinds of messages).

In the mid-1980s, the U.S. government declared a "War on Drugs." An extensive PSA campaign immediately ensued. Designed to reduce the demand for illegal drugs by educating the public about their dangers, the end goal was to change public attitudes and, consequently, their consumption behaviors (Shoemaker, Wanta, & Leggett, 1989). How powerful are these PSA campaigns aimed at changing the attitudes and behaviors of potentially drug-using adolescents?

The present study was undertaken with the expressed goal of assessing the perceived value of "the media" and other sources as credible providers of drug information. This descriptive study utilized structured interviews with adolescents with both closed and open format questions to determine the credibility of a wide range of potential sources of information and the self-determined effect of these messages on adolescents' drug using behavior.

METHODS

Respondents

Principals from 27 secondary schools in north central Idaho (Region 2) and southeastern Washington were asked to select a representative cross-section of students from their class rosters to participate in the anonymous interviews. A group of 223 junior and senior high age adolescents completed the first two

interview protocols. The results of the third interview protocol will not be discussed in this report. A total of 118 or 52.9% of the adolescents interviewed were male and the remaining 105 or 47.1% were female.

Interview Procedures

The interviewers for this study were undergraduate research methodology students who received training in face to face interviewing techniques. The interviewers traveled to the schools where interviews were completed during the winter of the 1988-89 school year. No interviewer completed an interview with an adolescent whom they knew, nor with an adolescent who knew them.

Because of the small sampling of students within each school, procedures were developed so that school personnel could not identify response patterns with individual respondents. Three separate interview protocols were developed and used. The first two interview protocols contained questions dealing with the impact of drug messages and drug usage information. A third interview protocol consisting of nondrug related questions was included to preserve the anonymity of the respondents by creating a blind situation for school personnel as only the adolescent respondent knew which protocol was used with him/her.

Interviewers used interview protocols arranged in a predetermined random order. Four of ten of the interview protocols used were interview protocol #1; the same ratio

pertained to protocol #2. Two of ten protocols were interview protocol #3.

RESULTS

Who Has Taught Adolescents The Most About Drugs?

The adolescent respondents were asked the open ended question, "Who has taught you the most about drugs?" The percentages of adolescents mentioning individuals who taught them the most about drugs are presented in Table 1. The adolescent respondents most often mentioned that they were taught the most about drugs by their parents (44.1%). Teachers were mentioned by 28.8% of the respondents as having taught them the most about drugs.

Insert Table 1 About Here

Important members of society at large such as doctors, nurses, law enforcement officers, school counselors, and clergy, were rarely or never mentioned as being the ones who taught adolescents the most about drugs. In fact, even when considering sports celebrities with these important members of society, fewer than 3% of students interviewed indicated all of these people combined taught them the most about drugs. Not a single respondent voluntarily mentioned doctors, nurses, movie stars, or political figures as the ones who taught them the most about drugs and alcohol.

Perceptions of the Sources of Drug Information

The adolescent respondents were asked if they felt their teachers, parents, and peers were well-informed about drugs and whether what they said could be trusted. The percentages of adolescents agreeing and disagreeing with these statements are presented in Table 2. Four of five adolescents perceived their parents and teachers to be well-informed about drugs and trusted their views on drugs. Only about 1 in 4 felt their peers could be trusted concerning their knowledge and comments about drugs.

Insert Table 2 About Here

Half of the adolescent respondents were asked a series of questions which were "take offs" on the popular E. F. Hutton commercials of a few years ago. The commercial's point was that "When E. F. Hutton talks, people listen." Students were asked whether they listened to 15 categories of people in their lives, when they talked about drugs and alcohol, using the "E. F. Hutton structured questions. The percentages of adolescents who indicated they always listened, usually listened, occasionally listened, and never listened to each category of people are presented in Table 3.

Insert Table 3 About Here

Most adolescents trusted their parents and teachers about drug information because they believed they were well informed on the topic. Furthermore, nine of ten adolescents indicated that they usually or always listen to their parents about drugs and eight of ten do so for their teachers.

While about 3 in 4 felt their peers could not be trusted concerning their knowledge and comments about drugs, 64.6% of the adolescents reported usually or always listening to their fellow students about drugs and alcohol. Similar findings were reported for the credibility of siblings.

When specific questions were asked about the credibility of doctors, nurses, law enforcement officers, school counselors, clergy, former addicts and sports celebrities, between 8 and 9 of ten adolescents indicated they usually or always listened to these people about drugs and alcohol; however, fewer than 3% of respondents indicated all of groups combined taught them the most about drugs. No respondent mentioned doctors, nurses, movie stars, or political figures as teaching them the most about drugs and alcohol.

The adolescents indicated they were much less likely to listen to TV and movie celebrities, about drugs and alcohol, than other identified categories of sources. Political figures and rock musicians were also much less likely to be listened to about drugs.

The half of the adolescent respondents who were not asked

the "E. F. Hutton" series of questions were asked the open ended question, "Who do you listen to about drugs?" The percentages of adolescents mentioning categories of individuals who they listened to the most about drugs are presented in Table 4.

Insert Table 4 About Here

The respondents mentioned that they listened to their parents and teachers the most about drugs. Friends were mentioned by 23.4% of the adolescents and 5.4% mentioned their siblings. Coaches, doctors, counselors, sports stars, political figures, and nurses were each mentioned by less than 5% of the respondents.

Perceived Effects of Direct Drug Messages On Personal Drug Use

Adolescents indicated their reactions to six different kinds of drug messages used in drug and alcohol education. Public service announcements used on television and in magazines and booklets, as well as activities employed in school and community drug prevention programs, were used as stimuli for this set of items. If the respondents reported seeing the type of message described, they were asked to indicate whether these messages strongly encouraged, encouraged, discouraged, strongly discouraged or had no effect upon use of drugs and alcohol. The percentages of adolescents who indicated they were encouraged or discouraged by these messages are presented in Table 5.

Insert Table 5 About Here

Scenes of automobile wrecks, emergency room treatments, mangled bodies, ambulances dashing to hospitals, funerals and cemeteries, etc. which are portrayed as resulting from drug and alcohol abuse seemed to discourage adolescent drug and alcohol use the most. Straightforward factual information about how drugs and alcohol affect the mind, body, and social life were also strongly discouraging of personal use for the adolescents. Also, addicted people describing how their lives have been torn apart by their habits were reported to strongly discourage personal drug use by student respondents.

School assemblies and special presentations to an entire student body were found to discourage personal drug use by 8 of ten respondents. While not as effective as the previously mentioned messages, over 80% of the respondents viewed them as effective in discouraging their personal use. Almost one in five adolescents indicated these methods had no effect on them.

While perceived to discourage personal drug and alcohol use by the majority of adolescents, pleas and urgings from varied celebrities not to use drugs or alcohol were the least effective strategy. In fact, nearly 4 of ten adolescents indicated this approach had no effect on their personal drug use.

Perceived Effects of Indirect Drug Messages On Personal Drug Use

Adolescents also indicated their reactions to seven different kinds of more indirect media messages about drugs including movies, music, music videos, and beer commercials. If they reported seeing the type of message described, adolescents were asked to indicate whether these messages strongly encouraged, encouraged, discouraged, strongly discouraged or had no effect on their own personal use of drugs and alcohol. The percentages of adolescents who indicated they were encouraged or discouraged by these messages are presented in Table 6.

Insert Table 6 About Here

Beer commercials were considered to encourage alcohol use by 16.1 % of the adolescents. Popular music (both rock and country) and music videos were considered to encourage drug and alcohol use by less than ten percent of the adolescents. At least 85% of the adolescent respondents indicated these messages either had no effect on their drug use or actually discouraged their drug use.

SUMMARY AND CONCLUSIONS

Adolescents in this region apparently listen to their parents and their teachers the most about drugs and alcohol and have learned the most about drugs from them. While peers are listened to by a sizable number of adolescents (1 in 4), most

adolescents do not view them as being nearly as credible, regarding drug and alcohol information, as parents and teachers.

One striking finding is the disparity between the high credibility for drug and alcohol information attributed to doctors, nurses, law enforcement officers, clergy and school counselors and the absence of adolescents who voluntarily indicated they learned the most about drugs from these individuals. Given the enormity of drug and alcohol problems in our communities, these individuals should take more active roles in dealing with adolescents through personal and community education efforts, especially in light of their perceived high levels of credibility.

Several strategies to discourage personal use of alcohol and drugs were perceived by adolescents to be effective. This is a very positive and encouraging finding for those interested in reducing drug and alcohol use levels among adolescents.

It is not possible to determine from the interview data whether the perceived effects actually moved adolescents from abuse levels to use levels, from use levels to nonuse, or some other pattern of change. While additional research efforts are needed to pinpoint the specific effects, the results here certainly indicate drug education messages are on the right track when a) factual information is provided to adolescents and b) real consequences of drug abuse are presented and discussed. The use of celebrities in these efforts received the least support

and probably deserves less attention in future public information efforts and campaigns. Another encouraging finding was the apparent lack of a "promoting" effect, on alcohol and drug use patterns, of beer commercials, rock music, country music and music videos.

Again, additional research measuring the specific effects of these types of media and messages is needed to validate the findings here. However, it appears that the vast majority of adolescents in this region are not encouraged to increase their personal use of alcohol and drugs by these media messages.

In summary, while the levels of certainty in conclusion-drawing which can be supported by descriptive research such as we conducted via these interviews are limited and emphasize the need for more research, our ability to influence adolescents' information bases, use patterns, and attitudes toward use of drugs is much more hopeful than many teachers, parents, and community leaders perceive. Further, the sources adults most fear as most negatively influencing adolescents' information about, and use levels of, drugs apparently have less credibility and influence than other more positively perceived source groups might have, if they would only pursue an active and consistent role and presence in public information efforts.

Specific Recommendations

1. Parents and teachers should continue to actively educate adolescents about drugs since they are trusted and believed

to be credible sources of information by adolescents.

2. Doctors, nurses, law enforcement officers, and clergy should be strongly encouraged to take a more active role in community education efforts since adolescents view them as very credible sources of drug information.
3. More drug education messages presenting factual information about the consequences of drug and alcohol abuse are very likely to discourage personal drug use among adolescents.
4. Efforts to decrease adolescent drug and alcohol abuse by activities designed to reduce the preponderance of beer commercials, rock music, country music and music videos do not appear to be worth the energy required to achieve their removal from public consumption.
5. Contrary to the perceptions of many parents and teachers, they are the only groups of adults who are <u>even mentioned</u> by adolescents as teaching them the most about drugs and drug use in a "zero prompt" situation.
6. About 80% of the adolescents in this study perceived parents and teachers to be trustworthy and well-informed about drugs. This contrasts with about 25% who identified peers as being credible, trustworthy sources. This research <u>does not support</u> frequently cited parent and teacher perceptions of themselves as being less credible sources of drug information than adolescents' peers.
7. In addition to parents and teachers, adolescents perceive

several other groups (physicians, nurses, counselors, drug users, siblings and clergy) as being worth listening to on the subject of drugs. If the message content used is factual, concerning the symptoms, conditions and consequences of drug use, adolescents will listen to many more sources than teachers and parents are prone to identify as credible.

8. Public information campaigns which emphasize the life style, physiological, emotional, and legal consequences of drug use are likely to be much more powerful in affecting adolescents' reported "personal use" of drugs than are commercials, videos, music and TV messages which adults perceive as glorifying and/or promoting drug use. The importance of factual information and use of perceived-to-be credible sources in such campaigns cannot be overstated, based upon the results of the research reported here.

REFERENCES

Bailey, W. J. (1985). Message source credibility in drug education. Journal of School Health, 55(9), 385-388.

Brown, E. F. and Hendee, W. R. (1989). Adolescents and their music: Insights into the health of adolescents. Journal of the American Medical Association, 262, 1659.

Goldberg, M. (1988, December 1st). Heavy metal on trial. Rolling Stone, p. 15.

Kotter, P. (1975). Marketing for nonprofit organizations. Englewood Cliffs, NJ: Prentice Hall.

Lutes, C. (1988, March 18th). Suicides blamed on music's satanic spell. Christianity Today, 32, 57.

Mann, P. (1988, July). How shock rock harms our kids. Readers Digest, 133, 101.

Ostling, R. N. (1990, March 19th). No sympathy for the devil: A cardinal decries satanic influence. Time, 135, 55.

Saks, M. J. & and Krupat, E. (1988). Social psychology and its applications. New York:Harper & Row, Publishers.

Sheppard, M. A. (1980). Sources of information about drugs. Journal of Drug Education, 10 (3), 257-262.

Shoemaker, P. J.; Wanta, W.; & Leggett, D. (1989). Drug coverage and public opinion, 1972-1986. In P. J. Shoemaker (ed.) Communication campaigns about drugs. Hillsdale, NJ: Lawrence Ehlbaum.

Solomon, D. S. (1989). A social marketing perspective on communication campaigns. In R. E. Rice and C. K. Atkins (eds.) Public communication campaigns, Beverly Hills, CA: Sage Publishers.

Table 1

Who Has Taught Adolescents The Most About Drugs And Drug Use?

Results of an Open-Ended Question

	Percent Mentioned
Parents	44.1
Teachers	28.8
Friends	8.1
Siblings	2.7
Counselors	1.8
Sports Stars	0.9
Coaches	0.9
Nurses	0.0
Doctors	0.0
Movie Stars	0.0
Political Figures	0.0
Others	21.6

Table 2

Who Do Adolescents Trust About Drug Information?

	Percentages				
	Strongly Agree	Agree	Unsure	Disagree	Strongly Disagree
What your PARENTS say about drugs can be trusted because they are well-informed.	41.4	42.3	8.1	7.2	0.9
In your experience at this school what your TEACHERS say about drugs can be trusted because they are well-informed about the subject?	16.2	63.1	15.3	5.4	0.0
What STUDENTS at your school say about drugs can be trusted because they are well-informed.	3.6	21.6	37.8	27.9	9.0

Table 3
When .... Talks, How Many Adolescents Listen Concerning Drugs and Alcohol?
Responses to Specific Questions

	Percentages			
	Always Listen	Sometimes Listen	Occasionally Listen	Never Listen
When DOCTORS talk about drugs and alcohol, I	73.6	19.1	5.5	3.6
When MY PARENTS talk about drugs and alcohol, I	70.6	20.2	6.4	2.8
When POLICE AND LAW ENFORCEMENT OFFICERS talk, I	64.5	26.4	5.5	3.6
When NURSES talk about drugs and alcohol, I	57.3	30.0	9.1	3.6
When SCHOOL COUNSELORS talk about drugs and alcohol, I	53.6	33.6	9.1	3.6
When STUDENTS FROM MY SCHOOL WHO HAVE RECEIVED TREATMENT FOR DRUG AND ALCOHOL ABUSE talk about drugs and alcohol, I	53.6	27.8	13.4	5.2
When TEACHERS talk about drugs and alcohol, I	47.3	33.6	14.5	4.5
When FORMER ADDICTS talk about drugs and alcohol, I	41.3	42.2	11.0	5.5
When MY BROTHERS AND SISTERS talk about drugs and alcohol, I	39.8	29.6	19.4	11.1
When CLERGY talk about drugs and alcohol, I	38.0	36.1	17.6	8.3
When SPORT CELEBRITIES talk about drugs and alcohol, I	30.9	45.5	18.2	5.5
When MY FRIENDS AND OTHER STUDENTS talk about drugs and alcohol, I	25.5	39.1	29.1	6.4
When MOVIE AND TV CELEBRITIES talk about drugs and alcohol, I	14.5	55.5	26.4	3.6
When POLITICAL FIGURES talk about drugs and alcohol, I	13.8	42.2	31.2	12.8
When ROCK MUSICIANS talk about drugs and alcohol, I	12.7	39.1	27.3	20.9

Table 4

Who Do Adolescents Listen To About Drugs?

Results of an Open-Ended Question

	Percent Mentioned
Parents	58.6
Teachers	31.5
Friends	23.4
Siblings	5.4
Coaches	4.5
Doctors	3.6
Counselors	2.7
Sports Stars	2.7
Movie Stars	2.7
Political Figures	2.7
Nurses	1.8
Others	25.2

Table 5

Reactions To Selected Media and Drug Education Messages

Type of Message	Percentages *					
	SD	D	NE	E	SE	HNS
Addicted people describing how their lives were torn apart by their habits. They also urge kids not to let it happen to them.	54.9	33.3	11.8	0.0	0.0	(8.0)
Straightforward factual information about how drugs and alcohol affect your mind, your body, and your social life.	45.0	45.0	10.1	0.0	0.0	(2.7)
Scenes of automobile wrecks, emergency room treatments, mangled bodies, people having seizures, ambulances dashing to hospitals, funerals and cemeteries, etc. which are all the results of drug and alcohol abuse.	78.7	14.8	6.5	0.0	0.0	(3.6)
Pleas and urgings from varied celebrities not to use drugs or alcohol, not to mess up your life and not to risk criminal prosecution associated with drug and alcohol use.	20.9	40.0	39.1	0.0	0.0	(1.8)
Symbolic messages like the one which shows an egg being fried and says "This is your brain. This is your brain on drugs. Any questions?"	50.0	33.6	16.4	0.0	0.0	(1.8)
School assemblies and special school presentations to all the students at your school.	23.0	59.0	18.0	0.0	0.0	(10.7)

* Adolescents indicated their own perceived reaction to each as strongly encouraged personal use (SE), encouraged personal use (E), no effect on personal use (NE), discouraged personal use (D), strongly discouraged personal use (SD), or have not seen or heard (HNS).

Table 6

Reactions To Music, Movies, and Commercial Messages

Type of Message	Percentages *					
	SD	D	NE	E	SE	HNS
Beer commercials such as the ones advertising Lite beer from Miller and the ones with Spuds MacKenzie.	6.3	7.2	70.3	15.3	0.9	(0.9)
Movies such as "Heavy Metal", "Breakfast Club", or the ones by Cheech and Chong.	4.2	12.6	73.7	7.4	2.1	(15.2)
Movies such as "Less Than Zero" or "Scarface".	14.5	19.4	62.9	3.2	0.0	(44.7)
Music videos such as ones by UB40 called "Red Red Wine", Eric Clapton's "Cocaine" or Glenn Frey's "Smugglers Blues".	7.1	11.8	75.3	2.4	3.5	(24.1)
The lyrics of many rock songs including ones like "Red Red Wine" by UB40 or "Cocaine" by Eric Clapton.	7.1	8.3	81.0	3.6	0.0	(6.3)
The lyrics of many rock songs including ones like "Tokyo Road" and "Bad Medicine" by Bon Jovi.	3.6	7.1	85.7	3.6	0.0	(6.3)
The lyrics of many country songs including ones like "Jose Cuervo" by Dottie West or many by Tom T. Hall.	5.3	36.8	57.9	0.0	0.0	(4.5)

* Adolescents indicated their own perceived reaction to each as strongly encouraged personal use (SE), encouraged personal use (E), no effect on personal use (NE), discouraged personal use (D), strongly discouraged personal use (SD), or have not seen or heard (HNS).